

WATER CONSERVATION

Home on the Range's design conserves precious water resources in a semiarid climate.

- Beneath its glittering surface of recycled glass, the parking lot is built on a grid of geotextile fabric, which holds the glass in place and allows water to permeate the ground, instead of running into the city's storm drains.



Parking Lot



Waterwise Native Gardens

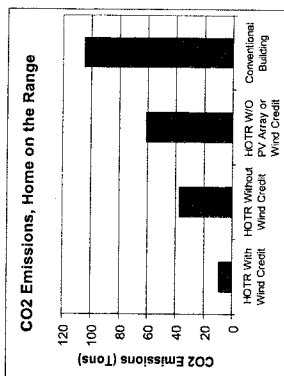
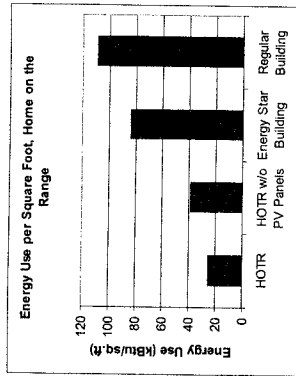
- The landscaping around the building features water-wise and native plants.
- Composting toilets and a waterless urinal, along with efficient landscaping, makes for water use of 170 gallons per day. This saves about 340 gallons of water a day compared to a traditional office.

YOU CAN HELP

Your generous contribution to Home on the Range Capital Campaign will help Northern Plains and WORC live our values. Your donation will be recognized on a display in the building lobby. For more information, please contact Northern Plains at 406.248.1154 or visit Home on the Range and see environmental design in action!

CLIMATE AND HEALTH

Home on the Range uses 21% as much energy as a comparable new office building built to code. Even more impressive is the fact that Home on the Range produces less than 10% the carbon dioxide of a regular building. Without the purchase of wind power credits and the solar panels on the roof, the building would still only use 40% the energy of a conventional building through efficient design features.



Employees are encouraged to bike or take public transportation to work. Bike racks and showers are provided, along with a full service kitchen for employee use. Extra vacation time is earned by using alternative modes of transportation.

NORTHERN PLAINS
RESOURCE COUNCIL



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Billings, Montana 59101
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www.greenhomeontherange.org



HOME ON THE RANGE

*A permanent home for
grassroots citizen action in the West*

EXHIBIT 3
DATE 2-10-09
HB 413

LIVING OUR VALUES

Since 1972, Northern Plains Resource Council has organized Montana citizens to protect our water quality, family farms and ranches, and unique quality of life. Northern Plains is a founding member of WORC (Western Organization of Resource Councils) which today represents a regional network of seven western organizations, coordinating efforts on issues such as sensible energy development and sustainable agriculture.

In 2003, Northern Plains Resource Council and WORC had outgrown our rented office space. Northern Plains and WORC set about designing a building that would reflect our commitment to energy conservation and community involvement. We purchased a vacant grocery store on Billings' south side and commenced constructing the greenest commercial building in Montana, and one of the most environmentally friendly buildings in the nation.

RENEWABLE ENERGY

Two south-facing photovoltaic arrays on the roof generate 37% of all electricity needed for the building in a year. Wind power credits cover the rest of the building's electricity needs, allowing for 100% carbon-neutral electricity.



Photovoltaic Solar Panels

INNOVATIVE LIGHTING SOLUTIONS

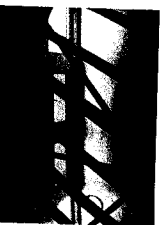
Lighting accounts for 20% of source energy use in most buildings. Two innovative, cost-effective, and simple features minimize the need for artificial lighting:

- Clerestories are north-facing windows on the roof that let indirect daylight penetrate the interior of the building during the day.

- Light Shelves mounted on the exterior windows reduce glare and distribute daylight throughout the interior work spaces, creating consistent ambient lighting and reducing unwanted solar heat gain.



Light Shelves



Clerestories

HEATING AND COOLING

Energy efficient heating and cooling systems and increased insulation allow Home on the Range to use 50 percent less energy for heating and cooling than a comparably sized office building.

- Radiant heating circulates hot water through tubes beneath the floor, warming the concrete and other objects in the room, which is more effective and energy efficient than heating the air.

- The evaporative cooling system moves warm air across a wet surface, cooling the air as the water evaporates; this type of cooling uses only a quarter of the energy of traditional air conditioning.



HVAC Tower



Radiant Floor Heating

- Home on the Range is "outsulated". With insulation placed on the outside of the cinderblock building, the building's thermal mass, including the containing wall, is kept at a more stable temperature.
- Solar hot water heating is used for hot water needs.

RECYCLED MATERIALS

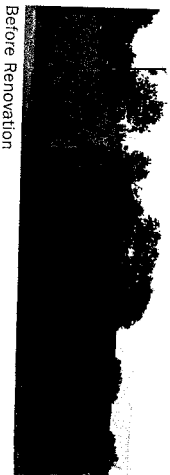
An important element of sustainable building is recycling and reusing construction materials, as well as purchasing materials locally.

- Instead of building a new structure, Northern Plains and WORC purchased an existing building.
- During demolition and construction, we reused or recycled 92% of the waste building materials.
- To reduce energy use and support local businesses, we purchased materials from businesses within a 500-mile radius whenever possible.
- Innovative recycled materials were used throughout the building. Sunflower seed hulls became countertops and desktops, and wheatboard was used in the desks.



Sunflower Seed Hull Desk

- Recycled plastics were used in the bathroom partitions, chairs in the entryway, and in carpeting throughout the building.
- The doors in the building were salvaged oak from a century-old building in downtown Billings.



Before Renovation

AWARDS AND RECOGNITION

Home on the Range is among the first fifty buildings in the world to achieve a LEED® Platinum Green Building Certification. Locally, it has been honored by Billings' Bright and Beautiful, in addition to receiving Montana State University's Eco-Star award. Home on the Range received EPA's Energy Star™ award and was featured in the Sonoran Institute's *Building from the Best of the Northern Rockies*.